# *Topomyia (Topomyia) cabrerai*, a New Species from the Philippines (Diptera: Culicidae)[1]

Ichiro Miyagi[2], Takako Toma[2] and Delfin G. Rivera[3]

ABSTRACT. *Topomyia (Topomyia) cabrerai*, a new species from Mindanao Is., the Philippines, is recognized. The adult male, the only known stage of this species, is described and the male genitalia are illustrated.

## INTRODUCTION

In a recent study of the *Topomyia* specimens from the extensive collection for the project "The phylogenic studies on mosquito fauna of Southeast Asia," initiated in 1981, several adult males were found with genitalia strikingly different from all other known species of the genus. The subsequent study of the male genitalia by us has finally led to the conclusion that these specimens represent a distinct new species. We take pleasure in dedicating this new species to Dr. Benjamin D. Cabrera, Professor of Parasitology, the University of the Philippines, who has contributed much toward the control of parasitic and arthropod-borne diseases in the Philippines. The terminology of our description follows Belkin (1962), Harbach and Knight (1980) or as subsequently modified by SEAMP personnel. The holotype and paratypes will be deposited in National Science Museum, Tokyo, Japan, and U. S. National Museum of Natural History, Washington, D. C.

## *Topomyia (Topomyia) cabrerai* new species

(Fig. 1)

MALE. *Head*: Vertex, occiput and side of head covered with broad, flat, dark decumbent scales; a large diamond-shaped patch of flat, silver scales at midvertex and similar patch on eye margin laterally; erect scales absent; 2

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[2]Laboratory of Medical Zoology, School of Health Sciences, Faculty of Medicine, University of the Ryukyus, Naha, Okinawa, 902, Japan.

[3]Malaria Eradication Service Department of Health, San Lazaro Compound, Manila 2805, Philippines.

frontal setae strong; torus (pedicel) brown with grayish pubescence; antenna about length of proboscis; proboscis 2.15 mm; flagellar segments black, each with 6-7 long black verticillate setae; clypeus small with grayish pubescence. Palpus short, about 0.1 length of proboscis, with dark scales. Proboscis as long as forefemur, covered by dark scales except for a yellowish band of scales on basal 0.15; 1 long pale basal seta ventrally. *Thorax*: Mesonotum black; integument densely covered with narrow, curved, blackish scales with a median line of broad, flat, silver scales extending from anterior promontory to about level of wing base; 4 posterior dorsocentral setae; 1 or 2 humeral, several anterior promontory and prescutellar setae present; scutellum covered with a large patch of flat, silver scales on midlobe and with black scales on lateral lobes; 2 setae on mid- and lateral lobes, respectively. Anterior pronotal lobe with conspicuous patch of silver scales and about 10 setae anteriorly; posterior pronotum with a few silver scales propleuron (proepisternum) with 2 black setae and with dense silver scales; postspiracular, subspiracular, sternopleuron and anterior mesepimeron with flat, silver scales; a patch of several setae on upper mesepimeron; metapleuron with a few yellowish scales. *Leg:* Forefemur 2.10 mm; all coxae with silver, flat scales and with a few yellowish setae. Forelegs black-scaled without conspicuous silver scales ventrally. Mid- and hindlegs black-scaled dorsally and with conspicuous silver scales ventrally; apical 1/5 hindtibia and basal 1/7 of hindtarsomere I with yellowish ciliation posteroventrally. Claws of all legs small, simple and equal in length. *Wing:* Length (without fringe) 2.8 mm., black-scaled; $R_2$ about 2.9 length of its stem ($R_{2+3}$); $M_{1+2}$ about 1.4 of stem (M). Anal vein ending beyond level of fork of Cu. Alula with several scales; upper calypter bare; halteres black scaled and with pale scales laterally. Sterna II to VIII covered with flat, silver scales.

MALE GENITALIA (Fig. 1). Tergum IX arch-like in shape; with a conspicuous spine arising from small tubercle, 1 or 2 fine setae on the lateral aspect of the spine. Gonocoxite narrow at base, broader at middle and slender at distal end, with numerous strong setae and scales; mesal membrane (MM) delicate bearing 6 delicate whip-like setae on apex. Claspette long, rod-like, spiculated, slightly bent stem; terminal appendage of claspette expanded at middle and bifurcated, with long curved point and with serrate sublobe; basal lobe (VL) with 1 strong and a few fine setae. Gonostylus (Gs) expanded basomedially, slender to apex with fine setae on outer margin and with an accessory small basal round lobe; gonostylor claw (Gc) small, black and curved; a few setae near the claw. IX sternite large expanded, with many fine setae on apical margin. Phallosome moderate and slender.

Immature stages and female are unknown.

TYPE-DATA. *Holotype:* Male with slide of genitalia (811225-2A), Ilomavis, Mt. Apo, Mindanao, the Philippines, 25 Dec. 1981, I. Miyagi. *Paratypes:* 2 males, 25 Dec. 1981, with slides of genitalia, 811225-1 and 811225-A; 1 male, 16 Dec. 1981, with slide of genitalia 811216-A, same place as holotype. All adult specimens were reared from larvae but larval and pupal skins were lost by accident.

TAXONOMIC DISCUSSION. The adult of *Topomyia cabrerai* is very similar to *Topomyia hernandoi* Baisas and Feliciano 1953, from Mindanao, differing from the latter by the following points: 1. Mid- and hindlegs with conspicuous ventral silver line not interrupted under all tersal segments; 2. Mesal membrance with a row of delicate short whip-like setae, without long, curved process with thread-like branches; 3. Bifurcated terminal appendage of claspette.

BIONOMICS. The larvae of *To. cabrerai* were found in leaf-axils of arboreal *Colocasia* growing on tree trunks 5 to 10 m above the ground at Mt. Apo, Mindanao Is., elevation about 1,000 m.

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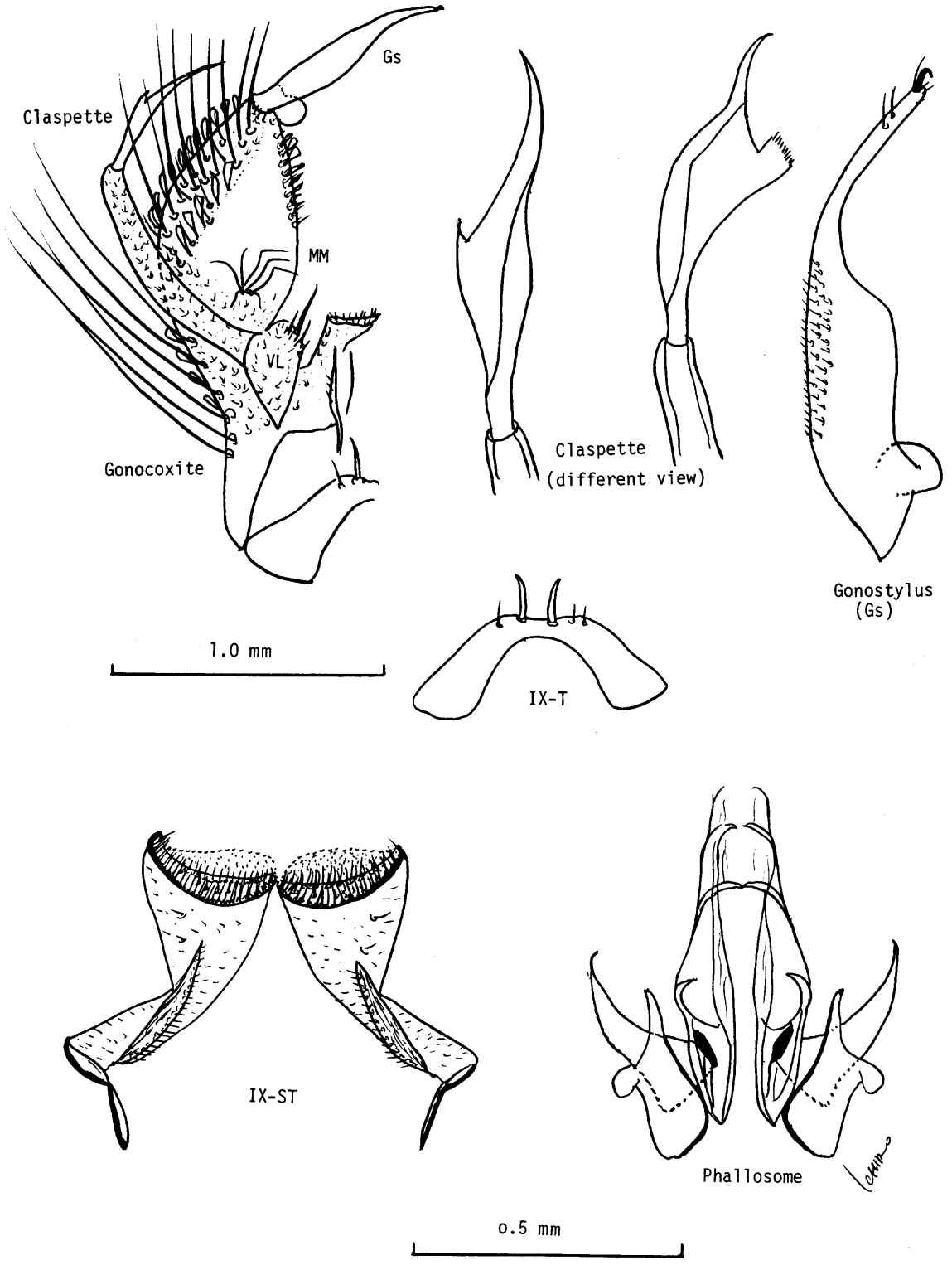
Fig. 1

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